

Morbidity and Mortality

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December 9, 1967

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

CURRENT TRENDS

INFLUENZA - Recent Reports

Further reports of influenza-like disease have been received by NCDC. In addition to the confirmed outbreaks of influenza A₂ in Kalamazoo and Lansing (MMWR, Vol. 16, No. 49), influenza-like disease was reported from southern and central Michigan. No new outbreaks were reported from Florida, but hemagglutination inhibition tests further support the diagnosis of A₂ influenza in Jacksonville and North Miami.

In Bergen County, New Jersey, four schools had increases in absenteeism from 10 to 30 percent beginning the week of November 26. Of six paired sera three showed

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diagnostic rises to influenza A by the complement fixation technique; one showed a diagnostic rise to A₂ influenza by hemagglutination inhibition. Geometric mean titers were significantly different between unpaired groups of acute and convalescent sera when tested for A influenza antigen by complement fixation.

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CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	49th WEEK ENDED		MEDIAN 1962 - 1966	CUMULATIVE, FIRST 49 WEEKS		
	DECEMBER 9, 1967	DECEMBER 10, 1966		1967	1966	MEDIAN 1962 - 1966
Aseptic meningitis	52	52	38	2,885	2,834	2,041
Brucellosis	3	3	8	236	235	343
Diphtheria	—	—	9	197	184	262
Encephalitis, primary:						
Arthropod-borne & unspecified	26	32	—	1,498	2,054	—
Encephalitis, post-infectious	1	9	—	724	686	—
Hepatitis, serum	7	38	—	2,203	1,383	—
Hepatitis, infectious	85	732	770	36,503	30,561	35,647
Malaria	3	14	4	1,984	472	101
Measles (rubeola)	372	1,358	3,071	61,110	199,343	377,354
Meningococcal infections, total	34	53	51	2,033	3,230	2,619
Civilian	33	45	—	1,909	2,917	—
Military	1	8	—	124	313	—
Poliomyelitis, total	2	1	2	41	97	114
Paralytic	—	1	2	27	91	91
Rubella (German measles)	409	407	—	43,067	44,918	—
Streptococcal sore throat & scarlet fever	10,028	9,732	7,744	419,342	396,822	367,161
Tetanus	7	2	5	216	187	266
Tularemia	2	4	4	160	172	272
Typhoid fever	6	11	11	389	363	432
Typhus, tick-borne (Rky. Mt. spotted fever)	—	6	—	297	251	220
Rabies in animals	85	65	72	4,001	3,803	3,803

NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax	2	Rabies in man	2
Botulism	3	Rubella, Congenital Syndrome: Ore.-1	9
Leptospirosis: Mont.-1	41	Trichinosis: Calif.-1, Kans.-1, N.Y.C.-1	57
Plague	2	Typhus, murine	42
Psittacosis: Wash.-1	43	Polio, Unsp. Calif.-2	13

INFLUENZA - Recent Reports *(Continued from front page)*

There is presumptive evidence that influenza A is occurring in the greater Chicago area. Throat smears from two ill students at Northwestern University and from six ill persons in Kane County, Illinois, were positive by the experimental fluorescent antibody technique for influenza A. Results of culture studies are pending.

Focal outbreaks of febrile respiratory disease manifested primarily by increased school absenteeism have occurred in Indiana, Alabama, and Oklahoma. Attempts at virus isolation are progressing in each area where febrile illness has been reported, but to date no virus has been identified.

(Reported by W. H. Y. Smith, M.D., C.P.H., Alabama State Department of Public Health; E. Charlton Prather, M.D., M.P.H., Florida State Board of Health; Norman J. Rose, M.D., M.P.H., and Richard Morrissey, M.P.H., Illinois Department of Public Health; A. L. Marshall, Jr., M.D., and William Turner, M.D., Indiana State Board of Health; George H. Agate, M.D., M.S.P.H., and Maurice Becker, M.D., Michigan Department of Public Health; R. Altman, M.D., and Martin Goldfield, M.D., New Jersey State Department of Health; R. L. Carpenter, M.D., M.P.H., Oklahoma State Department of Health; and EIS Officers.)

EPIDEMIOLOGIC NOTES AND REPORTS
COWPOX - Indiana

Change of Diagnosis

The clinical case of cowpox in a 56-year-old woman (M.W.) from Indiana (MMWR, Vol. 16, No. 46) has now been attributed to vaccinia virus on the basis of additional laboratory and epidemiologic evidence. Contrary to the earlier report, further tissue culture and histopathologic studies have demonstrated viral characteristics indicative of vaccinia. Epidemiologic investigation, furthermore, suggested a probable pattern of contact spread of vaccinia virus from a recently immunized infant.

On October 5, a 1-year-old female infant was vaccinated and developed a primary "take" with marked local reaction. This infant was in intimate contact with members of two related households; the first includes the infant, her parents, and three other children. The second is comprised of the infant's grandmother (M.W.) and three of M.W.'s children. About October 15, one of M.W.'s children (D.W.) developed lesions on the hands, becoming the first known human infection. Subsequently, the other members of this household also developed lesions, but M.W. was the only one to become systemically ill, requiring hospitalization. None of these persons had been vaccinated previously. In the other household, which included the vaccinated infant, no lesions were noted. The infant's parents were unvaccinated, but the three children had undocumented histories of smallpox immunization. Between October 10 and 15, one dairy cow of a herd of 20, tended and milked by hand by members of both households, developed lesions on the udder. Subsequently, lesions were noted on an additional 10 to 12 cows of this herd.

Epidemiologic data are insufficient to ascertain definitely the path of spread of vaccinia virus from the vacci-

nated child. However, it appears that virus from the infant's lesion may have been transferred to the index cow, with appearance of udder lesions which then produced the lesions in the unvaccinated human contacts. The remainder of the herd was then cross-infected during milking. Scrapings from lesions on one of these cows have been submitted to NCDC for virus isolation. Serologic studies are also in progress.

Initial laboratory study demonstrated the presence of pox virus in scrapings from lesions on the hands of M.W. Electronmicroscopy revealed pox virus particles in tissue culture; agar gel diffusion test was positive for pox virus group; and virus from first passage of crust material in embryonated eggs produced hemorrhagic pocks on the chorioallantoic membranes (CAM). This morphology was accepted as characteristic of cowpox, as opposed to vaccinia virus. The second passage of crust material, however, produced pocks most of which were without central hemorrhage, and were morphologically typical of vaccinia virus.

Histopathologic sections of the first passage CAMs, originally diagnosed as typical of cowpox, were subsequently found to have the granular and amorphous intracytoplasmic inclusion bodies, similar to the inclusion bodies of vaccinia and variola. These were distinctly different from the inclusion bodies of cowpox.

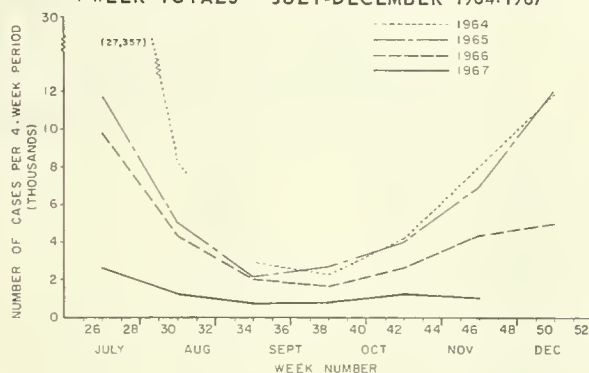
(Reported by A. L. Marshall, Jr., M.D., Director, Division of Communicable Disease Control, Indiana State Board of Health; Viral Exanthems Laboratory, and an EIS Officer, NCDC.)

CURRENT TRENDS

MEASLES - Nationwide

For the week ending December 9, 372 cases of measles were reported. This is the twenty-first consecutive week with less than 400 cases per week, an occurrence that has not been previously observed according to records dating back to 1912 when reporting of measles cases began on a national basis. The 4-week total for November 11 to December 9 is 1,213 cases (Figure 1), which is 25 percent of the cases reported for the same period in 1966, and 14 percent of the cases reported for the same periods in 1964 and 1965. By this time in the past four years a seasonal increase was evident; however, to date no seasonal increase has occurred.

Figure 1
REPORTED CASES OF MEASLES IN THE UNITED STATES
4-WEEK TOTALS - JULY-DECEMBER 1964-1967



MEASLES - Chicago

In the Chicago area from January to September 1967, 312 measles cases were reported. Investigation revealed 11.2 percent (35 cases) to be other diseases. Of the remaining 277 confirmed cases (147 males and 130 females), 50 percent were preschool children and 52 were children under 10 months of age (Table 1). Of the confirmed cases, 42 percent were hospitalized. Complications of otitis media, pharyngitis, and pneumonia occurred in 17 percent of the cases. No measles encephalitis was confirmed; however, encephalitis occurred in a person with positive measles serology but no clinical evidence of measles. Death from pneumonia occurred in two children, ages 8 and 11 months.

Table 1
Confirmed Measles by Race and Age*
Chicago, Illinois - January-September 1967

Age Groups	Race		Total	% Total
	White	Negro		
Under 10 months	17	35	52	20
10 months-4 years	28	132	160	60
5-14 years	16	37	53	20
15 years and older	1	0	1	<1
Total	62	204	266	100

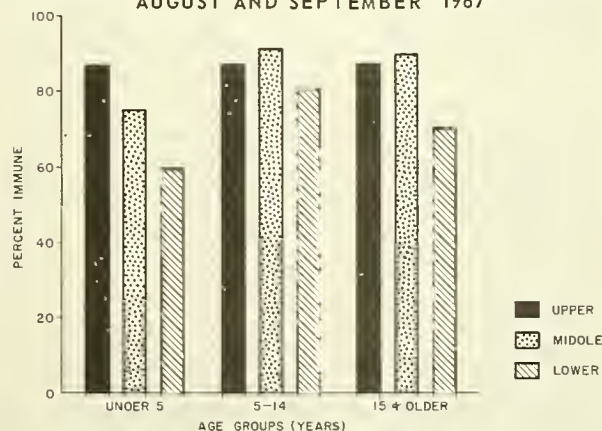
*Race and/or Age Unknown - 11 cases

Diagnosis of 97 percent of the 277 cases was by a visit to the patient's home, physician's office, private clinic, or hospital. Telephone calls established diagnosis in 3 percent. Of the diagnosed cases, 96 percent had not been immunized. Among eleven persons giving a history of immunization, eight had been immunized. In most cases the source of exposure to measles was difficult to determine; however, 44 children were exposed at school, 18

exposed at home, and 40 were exposed to neighborhood playmates. Only 2 percent were exposed outside the Chicago area.

In August and September 1967, a Preschool Child Immunization Index Survey¹ by socio-economic status, was conducted in 778 households in 200 city blocks. Results indicated that children under age 5 in the middle and lower socio-economic groups were most susceptible to measles as determined by a history of measles or measles vaccination (Figure 2). Although Chicago has had an active immunization program for 4 years, approximately 11,000 children per month are being vaccinated to decrease the number of susceptible children.

Figure 2
PERCENT OF MEASLES IMMUNE BY SOCIO-ECONOMIC GROUPS AND AGE - CHICAGO, ILLINOIS, SURVEY AUGUST AND SEPTEMBER 1967



(Continued on page 416)

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
DECEMBER 9, 1967 AND DECEMBER 10, 1966 (49th WEEK) - CONTINUED

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			
					Primary including unsp. cases		Post- Infectious	Serum		Infectious	
	1967	1966			1967	1966		1967	1966	1967	1966
UNITED STATES...	58	52	3	10	25	32	14	75	38	895	732
NEW ENGLAND.....	1	3	-	-	1	3	1	-	2	28	48
Maine.....	-	-	-	-	-	-	-	-	-	2	10
New Hampshire.....	1	-	-	-	-	-	-	-	-	-	1
Vermont.....	-	-	-	-	-	-	1	-	-	-	-
Massachusetts.....	-	1	-	-	-	-	-	-	2	12	25
Rhode Island.....	-	2	-	-	-	3	-	-	-	3	1
Connecticut.....	-	-	-	-	1	-	-	-	-	11	11
MIDDLE ATLANTIC.....	8	2	-	-	1	9	1	28	22	157	102
New York City.....	2	1	-	-	-	6	-	17	15	72	27
New York, Up-State.....	-	-	-	-	1	2	-	4	4	11	32
New Jersey.....	5	-	-	-	-	-	-	4	3	25	24
Pennsylvania.....	1	1	-	-	-	1	1	3	-	49	19
EAST NORTH CENTRAL...	6	-	-	-	9	8	4	2	-	124	129
Ohio.....	-	-	-	-	7	6	-	1	-	48	31
Indiana.....	-	-	-	-	-	1	-	-	-	13	2
Illinois.....	1	-	-	-	1	-	2	-	-	22	24
Michigan.....	4	-	-	-	1	1	2	1	-	35	39
Wisconsin.....	1	-	-	-	-	-	-	-	-	6	33
WEST NORTH CENTRAL...	-	-	2	-	1	1	1	1	1	53	51
Minnesota.....	-	-	-	-	1	1	1	1	-	26	9
Iowa.....	-	-	2	-	-	-	-	-	-	-	1
Missouri.....	-	-	-	-	-	-	-	-	1	20	30
North Dakota.....	-	-	-	-	-	-	-	-	-	-	8
South Dakota.....	-	-	-	-	-	-	-	-	-	1	-
Nebraska.....	-	-	-	-	-	-	-	-	-	2	1
Kansas.....	-	-	-	-	-	-	-	-	-	4	2
SOUTH ATLANTIC.....	8	8	-	4	6	1	1	2	1	74	85
Delaware.....	-	1	-	-	-	1	-	-	-	-	4
Maryland.....	4	1	-	-	2	-	-	-	-	10	16
Dist. of Columbia..	-	-	-	-	-	-	-	-	-	2	2
Virginia.....	-	-	-	4	-	-	-	-	-	6	14
West Virginia.....	-	-	-	-	-	-	-	-	-	8	5
North Carolina.....	2	1	-	-	2	-	-	-	1	12	5
South Carolina.....	2	-	-	-	-	-	-	-	-	4	3
Georgia.....	-	-	-	-	-	-	-	-	-	18	26
Florida.....	-	5	-	-	2	-	1	2	-	14	10
EAST SOUTH CENTRAL...	8	2	-	1	1	-	-	-	-	92	47
Kentucky.....	-	1	-	-	-	-	-	-	-	40	13
Tennessee.....	1	1	-	1	1	-	-	-	-	26	26
Alabama.....	1	-	-	-	-	-	-	-	-	9	4
Mississippi.....	6	-	-	-	-	-	-	-	-	17	4
WEST SOUTH CENTRAL...	1	12	-	5	1	3	3	4	2	75	66
Arkansas.....	1	-	-	3	1	1	-	2	-	-	3
Louisiana.....	-	1	-	-	-	1	1	1	2	13	13
Oklahoma.....	-	-	-	-	-	-	-	-	-	10	6
Texas.....	-	11	-	2	-	1	2	1	-	52	44
MOUNTAIN.....	-	-	-	-	-	2	1	-	-	25	50
Montana.....	-	-	-	-	-	-	-	-	-	5	4
Idaho.....	-	-	-	-	-	-	-	-	-	4	2
Wyoming.....	-	-	-	-	-	-	1	-	-	1	-
Colorado.....	-	-	-	-	-	-	-	-	-	4	5
New Mexico.....	-	-	-	-	-	2	-	-	-	8	19
Arizona.....	-	-	-	-	-	-	-	-	-	3	10
Utah.....	-	-	-	-	-	-	-	-	-	-	10
Nevada.....	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	26	25	1	-	5	5	2	38	10	267	154
Washington.....	2	1	-	-	-	-	-	-	-	18	17
Oregon.....	-	2	1	-	-	1	-	1	-	18	21
California.....	24	21	-	-	5	4	2	37	10	227	115
Alaska.....	-	-	-	-	-	-	-	-	-	3	1
Hawaii.....	-	1	-	-	-	-	-	-	-	1	-
Puerto Rico	-	-	-	-	-	-	-	-	-	9	28

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CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 9, 1967 AND DECEMBER 10, 1966 (49th WEEK) - CONTINUED

AREA	MALARIA	MEASLES (Rubeola)		MENINGOCOCCAL INFECTIONS, TOTAL			POLIOMYELITIS			RUBELLA	
	1967	1967	Cumulative		1967	Cumulative		Total	Paralytic	1967	
			1967	1966		1967	1966	1967	1967		Cum. 1967
UNITED STATES...	51	372	61,110	199,343	34	2,033	3,230	2	-	27	409
NEW ENGLAND.....	-	4	935	2,560	1	81	149	-	-	-	41
Maine.....	-	-	262	294	-	3	12	-	-	-	5
New Hampshire.....	-	1	78	80	-	3	9	-	-	-	-
Vermont.....	-	-	42	344	-	1	4	-	-	-	4
Massachusetts.....	-	2	393	831	1	37	62	-	-	-	9
Rhode Island.....	-	-	62	73	-	6	19	-	-	-	10
Connecticut.....	-	1	98	938	-	31	43	-	-	-	13
MIDDLE ATLANTIC.....	11	35	2,517	18,480	6	337	429	-	-	5	38
New York City.....	-	6	514	8,365	2	62	65	-	-	1	13
New York, Up-State.....	-	-	629	2,648	1	82	113	-	-	1	3
New Jersey.....	8	20	595	1,986	2	110	129	-	-	-	21
Pennsylvania.....	3	9	779	5,481	1	83	122	-	-	3	1
EAST NORTH CENTRAL...	2	62	6,090	70,154	2	279	509	-	-	6	114
Ohio.....	-	4	1,181	6,452	2	94	147	-	-	-	19
Indiana.....	-	9	656	5,804	-	31	88	-	-	3	8
Illinois.....	2	3	1,165	11,520	-	61	91	-	-	-	8
Michigan.....	-	11	1,017	15,057	-	72	130	-	-	3	37
Wisconsin.....	-	35	2,071	31,321	-	21	53	-	-	-	42
WEST NORTH CENTRAL...	-	10	2,953	9,251	1	94	166	-	-	3	29
Minnesota.....	-	1	134	1,681	-	21	36	-	-	-	2
Iowa.....	-	8	784	5,433	-	19	22	-	-	1	23
Missouri.....	-	-	340	538	1	19	64	-	-	-	-
North Dakota.....	-	-	886	1,374	-	3	11	-	-	-	4
South Dakota.....	-	-	58	40	-	7	6	-	-	-	-
Nebraska.....	-	1	657	185	-	15	11	-	-	-	-
Kansas.....	-	-	94	NN	-	10	16	-	-	2	-
SOUTH ATLANTIC.....	17	81	7,295	16,012	11	399	548	-	-	2	22
Delaware.....	-	1	51	267	-	8	7	-	-	-	-
Maryland.....	3	4	178	2,123	-	55	49	-	-	1	-
Dist. of Columbia..	-	1	25	390	-	15	15	-	-	-	-
Virginia.....	3	61	2,315	2,259	-	43	68	-	-	-	11
West Virginia.....	-	6	1,463	5,523	1	38	43	-	-	-	9
North Carolina.....	10	1	927	670	6	86	139	-	-	1	-
South Carolina.....	-	1	513	664	-	32	54	-	-	-	-
Georgia.....	-	-	42	241	2	59	77	-	-	-	-
Florida.....	1	6	1,781	3,875	2	63	96	-	-	-	2
EAST SOUTH CENTRAL...	3	27	5,487	20,568	6	162	277	-	-	2	13
Kentucky.....	1	2	1,430	4,834	-	45	96	-	-	-	5
Tennessee.....	-	21	2,023	12,643	4	72	93	-	-	-	8
Alabama.....	-	3	1,357	1,788	-	29	59	-	-	-	-
Mississippi.....	2	1	677	1,303	2	16	29	-	-	2	-
WEST SOUTH CENTRAL...	2	73	18,078	26,433	3	261	431	-	-	9	3
Arkansas.....	-	-	1,404	994	1	47	37	-	-	1	-
Louisiana.....	-	-	156	100	1	99	163	-	-	-	-
Oklahoma.....	2	-	3,359	630	-	18	23	-	-	1	-
Texas.....	-	73	13,159	24,709	1	97	208	-	-	7	3
MOUNTAIN.....	8	22	4,870	12,571	-	40	94	-	-	-	29
Montana.....	-	3	331	1,910	-	5	5	-	-	-	1
Idaho.....	-	4	399	1,690	-	3	5	-	-	-	-
Wyoming.....	-	-	202	234	-	1	6	-	-	-	-
Colorado.....	8	9	1,626	1,429	-	13	49	-	-	-	13
New Mexico.....	-	-	606	1,220	-	5	10	-	-	-	-
Arizona.....	-	5	1,053	5,359	-	6	13	-	-	-	15
Utah.....	-	1	384	664	-	4	1	-	-	-	-
Nevada.....	-	-	269	65	-	3	5	-	-	-	-
PACIFIC.....	8	58	12,885	23,314	4	380	627	2	-	-	120
Washington.....	-	31	5,654	4,980	-	37	54	-	-	-	36
Oregon.....	-	4	1,702	2,435	-	30	41	-	-	-	8
California.....	5	23	5,206	15,116	4	298	510	2	-	-	58
Alaska.....	-	-	141	619	-	11	18	-	-	-	16
Hawaii.....	3	-	182	164	-	4	4	-	-	-	2
Puerto Rico.....	-	5	2,241	3,412	-	15	18	-	-	-	2

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CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED

DECEMBER 9, 1967 AND DECEMBER 10, 1966 (49th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1967	1967	Cum. 1967	1967	Cum. 1967	1967	Cum. 1967	1967	Cum. 1967	1967	Cum. 1967
UNITED STATES...	10,028	7	216	2	160	6	389	-	297	85	4,001
NEW ENGLAND.....	1,136	1	3	-	1	-	10	-	1	4	103
Maine.....	55	-	-	-	-	-	-	-	-	-	24
New Hampshire.....	30	-	-	-	-	-	-	-	-	1	48
Vermont.....	6	-	-	-	-	-	-	-	-	3	25
Massachusetts.....	201	-	1	-	1	-	6	-	1	-	4
Rhode Island.....	140	-	-	-	-	-	1	-	-	-	2
Connecticut.....	704	1	2	-	-	-	3	-	-	-	-
MIDDLE ATLANTIC.....	194	2	16	-	1	1	40	-	35	2	97
New York City.....	13	1	9	-	-	1	21	-	-	-	-
New York, Up-State.	147	-	1	-	1	-	11	-	9	2	81
New Jersey.....	NN	-	1	-	-	-	4	-	15	-	-
Pennsylvania.....	34	1	5	-	-	-	4	-	11	-	16
EAST NORTH CENTRAL...	984	-	26	-	15	1	42	-	22	2	372
Ohio.....	68	-	4	-	-	-	14	-	11	-	131
Indiana.....	188	-	3	-	2	-	11	-	1	-	84
Illinois.....	166	-	13	-	13	1	7	-	10	2	71
Michigan.....	412	-	5	-	-	-	8	-	-	-	23
Wisconsin.....	150	-	1	-	-	-	2	-	-	-	63
WEST NORTH CENTRAL...	463	-	16	-	22	-	21	-	4	24	946
Minnesota.....	29	-	5	-	-	-	2	-	1	5	189
Iowa.....	139	-	2	-	1	-	3	-	-	3	128
Missouri.....	38	-	7	-	9	-	10	-	1	4	170
North Dakota.....	174	-	-	-	-	-	-	-	-	7	166
South Dakota.....	47	-	1	-	2	-	-	-	-	-	116
Nebraska.....	-	-	-	-	-	-	4	-	2	4	70
Kansas.....	36	-	1	-	10	-	2	-	-	1	107
SOUTH ATLANTIC.....	1,077	1	46	1	11	1	63	-	119	3	475
Delaware.....	4	-	-	-	-	-	-	-	-	-	-
Maryland.....	95	-	-	-	-	-	2	-	21	-	4
Dist. of Columbia..	85	-	-	-	-	-	3	-	-	-	6
Virginia.....	436	-	10	1	1	1	9	-	28	3	205
West Virginia.....	327	-	1	-	2	-	2	-	1	-	62
North Carolina.....	31	-	7	-	-	-	4	-	47	-	3
South Carolina.....	4	-	1	-	2	-	10	-	5	-	2
Georgia.....	16	-	4	-	5	-	21	-	17	-	115
Florida.....	79	1	23	-	1	-	12	-	-	-	78
EAST SOUTH CENTRAL...	1,603	2	33	-	12	-	64	-	53	22	762
Kentucky.....	116	-	4	-	2	-	24	-	15	5	173
Tennessee.....	1,239	-	8	-	7	-	11	-	26	15	529
Alabama.....	169	-	11	-	1	-	12	-	12	2	50
Mississippi.....	79	2	10	-	2	-	17	-	-	-	10
WEST SOUTH CENTRAL...	1,108	1	51	-	81	2	42	-	43	24	896
Arkansas.....	11	1	7	-	48	-	12	-	14	2	113
Louisiana.....	6	-	4	-	8	1	17	-	2	1	68
Oklahoma.....	48	-	4	-	18	1	8	-	16	14	353
Texas.....	1,043	-	36	-	7	-	5	-	11	7	362
MOUNTAIN.....	2,029	-	3	1	11	-	21	-	9	-	113
Montana.....	74	-	-	1	2	-	2	-	-	-	-
Idaho.....	64	-	-	-	-	-	-	-	-	-	-
Wyoming.....	191	-	-	-	2	-	1	-	-	-	5
Colorado.....	1,257	-	2	-	1	-	12	-	9	-	10
New Mexico.....	298	-	1	-	-	-	2	-	-	-	34
Arizona.....	76	-	-	-	-	-	4	-	-	-	52
Utah.....	67	-	-	-	6	-	-	-	-	-	3
Nevada.....	2	-	-	-	-	-	-	-	-	-	9
PACIFIC.....	1,434	-	22	-	6	1	86	-	11	4	237
Washington.....	384	-	-	-	2	-	2	-	2	-	2
Oregon.....	114	-	1	-	1	-	3	-	3	-	4
California.....	781	-	17	-	3	1	78	-	6	4	231
Alaska.....	83	-	-	-	-	-	-	-	-	-	-
Hawaii.....	72	-	4	-	-	-	3	-	-	-	-
Puerto Rico.....	8	-	18	-	-	-	8	-	-	-	32

Morbidity and Mortality Weekly Report

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Week No.
49

DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED DECEMBER 9, 1967

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	760	475	41	38	SOUTH ATLANTIC:	1,249	623	58	96
Boston, Mass.-----	221	128	14	15	Atlanta, Ga.-----	133	54	1	14
Bridgeport, Conn.-----	54	36	3	2	Baltimore, Md.-----	241	126	1	10
Cambridge, Mass.-----	19	11	-	1	Charlotte, N. C.-----	53	20	2	4
Fall River, Mass.-----	37	24	1	1	Jacksonville, Fla.-----	82	28	3	1
Hartford, Conn.-----	71	46	1	3	Miami, Fla.-----	123	65	2	6
Lowell, Mass.-----	26	17	3	1	Norfolk, Va.-----	64	29	5	6
Lynn, Mass.-----	19	9	1	2	Richmond, Va.-----	75	48	2	4
New Bedford, Mass.-----	23	16	2	-	Savannah, Ga.-----	30	19	3	2
New Haven, Conn.-----	60	35	-	7	St. Petersburg, Fla.-----	84	70	6	-
Providence, R. I.-----	63	42	2	1	Tampa, Fla.-----	93	52	12	2
Somerville, Mass.-----	19	11	2	1	Washington, D. C.-----	225	86	18	47
Springfield, Mass.-----	37	31	7	1	Wilmington, Del.-----	46	26	3	-
Waterbury, Conn.-----	40	28	-	-					
Worcester, Mass.-----	71	41	5	3	EAST SOUTH CENTRAL:	740	402	32	35
MIDDLE ATLANTIC:	3,599	2,134	129	157	Birmingham, Ala.-----	114	51	4	3
Albany, N. Y.-----	45	28	2	1	Chattanooga, Tenn.-----	67	37	6	4
Allentown, Pa.-----	38	26	2	2	Knoxville, Tenn.-----	57	38	5	1
Buffalo, N. Y.-----	153	86	3	17	Louisville, Ky.-----	150	87	11	8
Camden, N. J.-----	47	24	-	3	Memphis, Tenn.-----	170	91	-	7
Elizabeth, N. J.-----	31	16	1	2	Mobile, Ala.-----	44	24	-	-
Erie, Pa.-----	32	15	1	1	Montgomery, Ala.-----	48	28	3	4
Jersey City, N. J.-----	82	47	2	2	Nashville, Tenn.-----	90	46	3	8
Newark, N. J.-----	97	44	2	5	WEST SOUTH CENTRAL:	1,218	660	54	69
New York City, N. Y.-----	1,824	1,073	68	75	Austin, Tex.-----	35	31	5	1
Paterson, N. J.-----	44	28	2	2	Baton Rouge, La.-----	35	20	1	-
Philadelphia, Pa.-----	551	324	12	24	Corpus Christi, Tex.-----	36	14	-	4
Pittsburgh, Pa.-----	202	117	3	8	Dallas, Tex.-----	170	93	3	10
Reading, Pa.-----	50	33	4	3	El Paso, Tex.-----	46	18	4	3
Rochester, N. Y.-----	118	77	9	6	Fort Worth, Tex.-----	94	53	5	5
Schenectady, N. Y.-----	29	18	1	1	Houston, Tex.-----	211	97	8	11
Scranton, Pa.-----	52	39	4	1	Little Rock, Ark.-----	62	32	3	5
Syracuse, N. Y.-----	66	38	-	3	New Orleans, La.-----	163	89	5	14
Trenton, N. J.-----	63	44	4	1	Oklahoma City, Okla.-----	102	57	1	4
Utica, N. Y.-----	34	24	7	-	San Antonio, Tex.-----	113	60	4	5
Yonkers, N. Y.-----	41	33	2	-	Shreveport, La.-----	66	41	3	2
EAST NORTH CENTRAL:	2,786	1,579	82	145	Tulsa, Okla.-----	85	55	12	5
Akron, Ohio-----	60	33	-	3	MOUNTAIN:	392	221	17	17
Canton, Ohio-----	34	19	3	4	Albuquerque, N. Mex.-----	47	27	8	2
Chicago, Ill.-----	770	395	25	50	Colorado Springs, Colo.-----	22	14	1	-
Cincinnati, Ohio-----	220	137	7	9	Denver, Colo.-----	93	51	2	6
Cleveland, Ohio-----	226	138	3	4	Ogden, Utah-----	20	7	1	1
Columbus, Ohio-----	138	80	-	6	Phoenix, Ariz.-----	92	48	1	1
Dayton, Ohio-----	95	58	4	3	Pueblo, Colo.-----	9	6	1	1
Detroit, Mich.-----	369	202	8	18	Salt Lake City, Utah-----	52	32	2	3
Evansville, Ind.-----	44	25	5	3	Tucson, Ariz.-----	57	36	1	3
Flint, Mich.-----	57	31	1	6	PACIFIC:	1,627	980	49	61
Fort Wayne, Ind.-----	37	26	1	1	Berkeley, Calif.-----	25	16	-	-
Gary, Ind.-----	28	17	4	1	Fresno, Calif.-----	58	33	1	3
Grand Rapids, Mich.-----	77	49	11	2	Glendale, Calif.-----	32	23	-	2
Indianapolis, Ind.-----	177	106	4	7	Honolulu, Hawaii-----	42	26	3	2
Madison, Wis.-----	51	24	-	7	Long Beach, Calif.-----	65	33	5	6
Milwaukee, Wis.-----	142	79	3	6	Los Angeles, Calif.-----	520	326	13	19
Peoria, Ill.-----	59	31	1	7	Oakland, Calif.-----	80	39	1	3
Rockford, Ill.-----	29	13	1	1	Pasadena, Calif.-----	32	22	1	1
South Bend, Ind.-----	21	17	1	1	Portland, Oreg.-----	111	73	3	7
Toledo, Ohio-----	100	62	-	5	Sacramento, Calif.-----	59	27	1	1
Youngstown, Ohio-----	52	37	-	1	San Diego, Calif.-----	89	49	-	4
WEST NORTH CENTRAL:	826	519	26	52	San Francisco, Calif.-----	215	134	8	7
Des Moines, Iowa-----	54	30	1	5	San Jose, Calif.-----	49	30	4	-
Duluth, Minn.-----	34	27	-	1	Seattle, Wash.-----	154	86	7	3
Kansas City, Kans.-----	49	32	2	3	Spokane, Wash.-----	53	33	1	2
Kansas City, Mo.-----	116	75	4	7	Tacoma, Wash.-----	43	30	1	1
Lincoln, Nebr.-----	27	20	-	1	Total	13,197	7,593	488	670
Minneapolis, Minn.-----	113	73	3	7	Cumulative Totals				
Omaha, Nebr.-----	66	39	2	8	including reported corrections for previous weeks				
St. Louis, Mo.-----	268	162	9	17	All Causes, All Ages -----	603,355			
St. Paul, Minn.-----	69	44	2	2	All Causes, Age 65 and over-----	344,537			
Wichita, Kans.-----	30	17	3	1	Pneumonia and Influenza, All Ages-----	21,101			
					All Causes, Under 1 Year of Age-----	30,605			

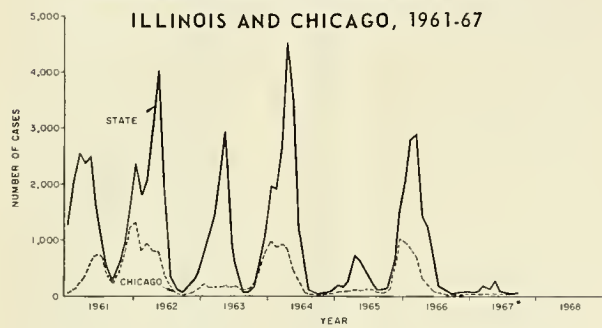
*Estimate - based on average percent of divisional total.

MEASLES - Chicago (Continued from page 411)

In the years 1962, -64, and -66, for Chicago and Illinois, the peak incidence of measles occurred in early spring preceded in the late fall and winter by increases in reported measles cases (Figure 3). To date this expected early seasonal increase has not occurred.

Figure 3

REPORTED CASES OF MEASLES BY MONTH
ILLINOIS AND CHICAGO, 1961-67



* 1967 - STATE PROVISIONAL, CHICAGO CONFIRMED

(Reported by Samuel L. Andelson, M.D., M.P.H., Commissioner of Health, William I Fishbein, M.D., Medical Director, Bureau of Health Services, and Hyman G. Orbach, Ph.D., Epidemiologist, Chicago Board of Health.)

REFERENCE

¹Serfling, Robert E. and Sherman, Ida L.: *Attribute Sampling Methods*, United States Government Printing Office, Washington, D.C., 1965

INTERNATIONAL NOTES
QUARANTINE MEASURES

Immunization Information for International Travel
1967-68 edition—Public Health Service Publication No. 384

Section 5

OCEANIA

Nauru Islands - Page 78

SMALLPOX

Delete all previous information. Insert: Smallpox vaccination is required from all arrivals, except Australia and Tasmania, British Solomon Islands, Christmas (Indian Ocean) and Cocos (Keeling) Islands, Fiji, Gilbert and Ellice, Heard, Kerguelen, Lord Howe, Macquarie, New Zealand, Norfolk and Ocean Islands, Australian Territory of Papua and New Guinea, Tonga, provided travelers have not been outside these areas for at least 14 days before arrival and these areas are free of smallpox. Nauru reserves the right, in respect of arrivals, from other areas, to isolate any person who arrives without certificate and refused to be vaccinated.

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 17,000, IS PUBLISHED AT THE NATIONAL COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

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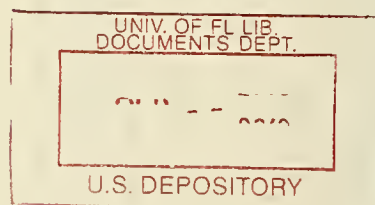
IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE NATIONAL COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

NATIONAL COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333

ATTN: THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

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